



# MARSHALL STAR

Serving the Marshall Space Flight Center Community

Feb. 28, 2002

## Inside the Star

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### Space Launch Initiative update

## Stennis completes testing of Boeing Rocketdyne advanced catalyst bed

*Marshall news release*

**S**tennis Space Center near New Orleans completed the final phase of the Boeing Rocketdyne advanced catalyst bed development program Jan. 16. Hydrogen peroxide is being pursued as a storable upper-stage rocket propellant because it is a less toxic

alternative to currently used propellants. Approximately 14,000 pounds of hydrogen peroxide propellant was handled safely and expended in support of this phase of testing.

The test program primarily featured 98

*See SLI Update on page 4*

## *Brock, Posey honored at NASA award ceremony*

*NASA news release*

**M**arshall Center's David Brock of the Small Business Office and Emil Posey of the Procurement Office were among honorees at NASA's annual Minority Business Advocates Award Ceremony Feb. 20.

NASA recognized them as outstanding advocates for their contributions and innovative approaches to utilizing minority- and women-owned businesses. Brock, Posey and Dr. Grigory Adamovsky (Technical), from Glenn Research Center in Cleveland received NASA's Exceptional Achievement Medal.

Three minority contractors were honored for their innovative and outstanding contributions to NASA.

Gilcrest Electric & Supply Company Inc, headquartered in Elyria, Ohio, was named NASA Minority Contractor of the Year. Gilcrest is a prime contractor to Glenn Research Center in Cleveland. Gilcrest supports Glenn's Facilities and Test Engineering Division.

Muniz Engineering Inc., headquartered in Houston, Texas, took home the award for Minority Subcontractor of the Year. Muniz provides structural mechanical design and analysis, thermal and

environment control systems, and systems engineering services to The Boeing Company, a prime contractor at Johnson Space Center in Houston.

SA Technologies Inc. received the award for the Women Owned

Business of the Year. The company, headquartered in Marietta, Ga., provides situational awareness research, decision-making and automation in aircraft, air traffic control and aviation maintenance services to Ames Research Center at Moffett Field, Calif.

In addition, Charles Harper, chairman of the board, Sierra Monolithics, Redondo Beach, Calif.; Ramen Singh, president, Dynacs Engineering, Inc., Palm Harbour, Fla.; and Carl Eichenlaub, procurement analyst, Office of Procure-

ment, NASA Headquarters received Special Recognition Awards for specific outstanding accomplishments.

Eight NASA Centers were recognized for meeting or exceeding all of their negotiated socio-economic business goals for fiscal year 2000. Centers recognized were Dryden Flight Research Center, Edwards, Calif.; Goddard Space Flight Center, Greenbelt, Md.; Glenn Research Center, Langley Research Center, Hampton, Va.; Johnson Space Center, Marshall Center, Kennedy Space Center, Fla.; and the Jet Propulsion Laboratory in Pasadena, Calif.



**Brock**



**Posey**

# Setting goals, positive attitude help nurture excellence

*Editor's note: Each week during Black History Month, the "Marshall Star" will feature a Q&A with African-American leaders at the Marshall Center who are "Profiles in Excellence."*

Q

How do you nurture individual excellence? Where are the greatest opportunities for advancement at the Center?



**Jackson**

**Kurt Jackson**, who has worked at Marshall since 1983, is the group leader of the Instrumentation and Control Group within the Avionics Department. The Instrument and Control Group performs research, design, technology development and plans, coordinates, and directs the application of components and subsystems for a) Flight Instrumentation Systems, b) Guidance, Navigation, and Control Hardware Systems, c) Pointing Control and Attitude Determination Systems, d) Imaging Systems, and e) Advanced Sensor Technology Development.

A

"I believe individuals should set high goals for themselves, both professional and personal, and always strive to do the best job he or she is capable of in all endeavors." Jackson considers the Marshall Center to be a diverse organization with opportunities for advancement in all areas.

"Adhering to the philosophy of doing the best job you are capable of in any endeavor will best position you to take advantage of these opportunities."

**Charles Scales** started his career at Marshall as a cooperative education student in 1973 in the Management Services Office/ Institutional and Program Services Directorate. He is the director of Marshall's Equal Opportunity Office. His office helps ensure Marshall's workforce is representative of the nation's labor population, and that equal employment opportunity is available to all persons.



**Scales**

A

"Having a positive attitude is essential for achieving individual excellence.

A positive attitude coupled with good mentoring leads to individual and organizational excellence. I have been very fortunate to have several of the "best and brightest" at the Marshall Center to mentor me. I also serve as a mentor to numerous employees." Scales said advancement occurs when preparation meets opportunity. "Each employee should set personal goals that align with organization roles and missions and be prepared when opportunities occur. Take advantage of the many training opportunities offered by the Center."



**Goodson**

**Amanda Goodson**, joined the Marshall Center in 1983 as a professional engineering intern assigned to the Test Surveillance Branch, Product Assurance Office, Science and Engineering Directorate. She is the director of the Safety and Mission Assurance Office at Marshall where she is an authority for planning, establishing and directing programs and organizations with a wide range of responsibility.

A

To nurture individual excellence you need to "capitalize on your strengths at all times. Find a place where your passion, values and goals intersect and go for it. There are endless opportunities for advancement at the Marshall Center. Behind a barrier and around an obstacle lies a golden opportunity waiting for you as an individual."

# Astronaut, Dr. Shannon Lucid, selected as chief scientist; retired Marine general to lead Johnson Space Center

NASA news release

NASA Administrator Sean O'Keefe has selected space veteran and NASA astronaut Dr. Shannon W. Lucid as the agency's next chief scientist, and retired Marine Lt. Gen. Jefferson Davis Howell Jr. to be director of the Johnson Space Center in Houston.

## Shannon Lucid

The only woman to be awarded the Congressional Space Medal of Honor by the President of the United States, Lucid



Lucid

currently supports Space Shuttle and International Space Station missions as spacecraft communicator.

Lucid will be responsible for ensuring the scientific merit of the agency's programs. She will report for duty as soon as she fills her responsibilities as Capcom for STS-109.

"Dr. Lucid brings impressive credentials in the fields of chemistry and biochemistry research to NASA Headquarters," O'Keefe said. "The chief scientist has a tremendous responsibility to develop and communicate the agency's science and research objectives to the outside world. What better selection than a NASA scientist and astronaut with extensive experience living and working in the harsh environment of space?"

She replaces Dr. Kathie Olsen, whom the President has announced his intention to nominate as the associate director of the Office of Science and Technology Policy (OSTP) in the Executive Office of the President.

A veteran of five Space Shuttle flights, Lucid was among the first six women ever selected to become an astronaut and she currently holds the United States' single mission flight endurance record as a result

of her mission to the Russian space station Mir in 1996.

She was selected by NASA in 1978 and became an astronaut in August 1979. Lucid has flown as a mission specialist on STS-51G in 1985, STS-34 in 1989, STS-43 in 1991 and STS-58 in 1993. In 1996, she was flown to Mir during STS-76, where she served as an engineer and conducted numerous life science and physical science experiments during her stay in orbit.

When Lucid returned to Earth during STS-79, she had traveled more than 75 million miles and spent more than 188 days in orbit.

## Jefferson Howell

Effective April 1, Jefferson D. Howell Jr. will be the new director for Johnson Space Center in Houston.

Howell, a retired U.S. Marine Corps lieutenant general and former commander of Marine Forces, Pacific, currently serves as senior vice president and program manager for the Safety, Reliability and Quality Assurance contract at Johnson. He is employed by Science Application International Corporation (SAIC).

"General Howell is a true patriot and leader with more than three decades of executive management and financial management experience," O'Keefe said. "Throughout his military and civilian careers, Jeff has been a leader, an innovator and a team builder. He's the right person to lead the NASA center that's the cornerstone of our human spaceflight operations."

Howell replaces Roy S. Estess, who was temporarily assigned to Johnson last February as acting director. Estess, a native of Mississippi, will return to his duties as director of the John C. Stennis Space Center.

Howell has been with SAIC since February 1999, when he first served as deputy program manager of the safety contract. He was named program manager in August 1999. Howell manages more than 525 people in support of a contract focused

on safety and mission assurance in support of the Space Shuttle and International Space Station programs.

He retired from the U.S. Marine Corps in 1998 as Marine Forces

Pacific Commander, reporting to the four star Commander in Chief, Pacific. Howell was responsible for the operational readiness, training, equipping and welfare of 80,000 Marine personnel based throughout the area. In this capacity, Howell was also charged with maintaining the readiness of more than 600 aircraft and managing an annual operational budget of more than one billion dollars.

Assigned to naval flight training in 1964, Howell earned his wings as a Naval Aviator in 1965. He flew more than 300 combat missions during Vietnam.

In 1995, after numerous commands, he was promoted to lieutenant general and assigned as the Commander, Marine Forces Pacific/Commanding General Fleet Marine Forces Pacific and Commander Marine Corps Bases, Pacific. He was headquartered at Camp H.M. Smith, Oahu Hawaii, and designated Commander of U.S. Marine Forces Korea and Commander of U.S. Marine Forces Central Command.

During a distinguished military career, Howell was awarded the Navy Distinguished Service Medal, the Defense Superior Service Medal, the Legion of Merit, a Bronze Star, the Air Medal with two individual and 25 strike flight awards, and the Navy Commendation Medal. In 1980, he received the John Paul Jones Award for Inspirational Leadership from the Navy League of the United States.

He earned a bachelor's degree in political science and a master's degree in economics at the University of Texas.



Howell



Photo by Doug Stoffer, NASA/Marshall Space Flight Center

## **NASAexplores reaches one-year milestone**

NASAexplores team members, as well as members of NASA's Education Department and guests, recently enjoyed cake, snacks and punch to celebrate the first year of production for NASAexplores. NASAexplores is a NASA education Web site providing express lessons and online resources to the K-12 community. Aerospace Technology and the Human Exploration and Development of Space Enterprises sponsor the program. NASAexplores is available on the Web at: <http://www.nasaexplores.com>

## **SLI Update**

*Continued from page 1*

percent concentration hydrogen peroxide, with additional tests performed at 72 percent at the request of the U.S. Air Force. Testing for the project began Nov. 1, last year.

The material used in the catalyst bed reacts with hydrogen peroxide to produce super heated steam and oxygen. The gas from the catalyst bed can be used to drive a gas turbine, provide thrust as a monopropellant or provide an oxidizer for bipropellant engines.

A total of 269 tests in 29 days, with an accumulated duration of 29,650 seconds on five test articles, were successfully accomplished in this phase of testing, including one catalyst bed that was tested to 10,285 seconds with 98 percent hydrogen peroxide. This demonstrated double Rocketdyne's catalyst life goal for 98 percent hydrogen peroxide.

Data indicated the overall performance was excellent. This testing will pave the way for follow-on testing of advanced turbopumps and hypergolic injectors being developed for upper stage engines under NASA's Space Launch Initiative.

For more information, contact Paul

Foerman of the Stennis Space Center  
Media Relations Department by e-mail at:

[paul.foerman@ssc.nasa.gov](mailto:paul.foerman@ssc.nasa.gov) or call (228) 688-3341.

## **Thiokol's SEHO to manufacture SLI composite tank dome**

*Marshall news release*

**A**TK Thiokol's Science and Engineering Huntsville Operations (SEHO) is manufacturing a subscale composite tank dome for NASA's Space Launch Initiative (SLI) for a second-generation reusable launch vehicle.

The subscale composite dome will be manufactured for Northrop Grumman under contract to NASA at the Marshall Center's National Center for Advanced Manufacturing.

The contract will aid Northrop Grumman in demonstrating that the composite lay-up requirements for

the program can be met at a subscale level. Northrop Grumman was one of the contractors funded under NASA's first phase of the SLI development program.

Successful fabrication of the dome will lead to completion of an entire subscale tank by this spring.

For more information, contact Beverly Poirier by e-mail at [Beverly.Poirier@THIOKOL.com](mailto:Beverly.Poirier@THIOKOL.com) or call (435) 863-5722.

# U.S. Centennial of Flight Commission announces partners

NASA news release

As the 100th anniversary of the Wright brothers' first flight approaches, organizations across the country are preparing to take part in the national celebration, "Centennial of Flight: Born of Dreams — Inspired by Freedom." The U.S. Centennial of Flight Commission, which is coordinating the celebration, has announced that seven organizations, listed below with their Web site addresses, have been designated official partners of the Commission.

"Centennial partners have a huge impact on the success and outcome of the Centennial celebration," said Gen. J.R. "Jack" Dailey, chairman of the Commission. "These organizations have been given partnership status because they have proven that their events and materials are exceptionally relevant to the centennial of powered flight or the history of aviation and also have a strong educational focus. Everyone has similar goals and objectives; by working together we will only make the celebration stronger."

- **The American Institute of Aeronautics and Astronautics' Evolution of Flight Campaign** is designed to mark the 100th anniversary of powered flight; recognize the achievements of men and women who challenged history; and lay the groundwork for the next 100 years of innovation in aviation and space technology. The institute will honor individuals in aerospace history, encourage new talent in the sciences to ignite innovation in the aerospace industries and bring the leaders of the community together to shape a common vision for the future. Highlights of the campaign include: The International Air and Space Symposium and Exposition "The Next 100 Years" in Dayton, Ohio; 1903 Wright Flyer Tour and Exposition; Class of 2003 Ambassadors; graduate awards/student scholarships; student branch activities; and a lecture series. <http://www.flight100.org/>

- **Aviation Week's "The Next Century of Flight"** is dedicated to helping the global aerospace industry capitalize on the 100th anniversary of powered flight and position itself for generations to come. Since it was launched in 1998, "The Next Century of Flight" has connected with millions of professionals and enthusiasts around the world via original Aviation Week articles and essays, curriculum support for students and teachers, and related partner programs, all promoted by an integrated event and media marketing campaign. <http://www.aviationnow.com/NextCentury>

- **Aviation World's Fair 2003** will be a celebration that embraces all nations and all aspects of aviation. The Fair, which will be held April 7-27, 2003, in Newport News, Va., will gather together the global aerospace community to present the complete picture of aviation, promote the unique contributions aviation has made to society, and educate and inspire the next generation of aerospace industry and aviation leaders. The event will be both a time capsule of the past 100 years and a window through which to view the future of aviation. <http://www.awf2003.com/>

- **Experimental Aircraft Association's** centennial celebration, "Countdown to Kitty Hawk presented by Ford Motor

Company," includes a series of activities to mark the 100th anniversary of the Wright brothers' achievement. The centerpiece of the celebration and a highlight of the Centennial events will be the flight of Experimental Aircraft Association's 1903 Wright Flyer reproduction — the only accurate flying reproduction of the original — at Kill Devil Hills, N.C., on Dec. 17, 2003, 100 years to the minute after that remarkable first flight. Tom Poberezny, president and chief executive officer of EAA, is a Centennial of Flight Commissioner and a nationally recognized authority on significant contributions to aviation and the 1903 Wright Flyer. <http://www.countdowntokittyhawk.org/>

- **The First Flight Centennial Commission** is charged with developing and planning activities to commemorate the centennial of the first flight in North Carolina with Centennial partners nationwide. The Commission's programs include public awareness, education and special events. Activities in 2003 include: events at Wright Brothers National Memorial Dec. 13-17; Fayetteville Festival of Flight May 16-26; World Flight 2003 invitational fly-in for pilots; First Flight Symphony; North Carolina Class of 2003; and legacy projects in the visual and performing arts at the Outer Banks and across the state. <http://www.firstflightnc.com/>

- **The First Flight Centennial Foundation** is located in North Carolina. The Foundation's objectives include improving the Wright Brothers National Memorial, helping to produce the First Flight Centennial event on site in December 2003, and sharing the story of the Wright brothers and their achievements through specific events and activities. The Foundation, which is a fund-raising partner of the National Park Service, has several major projects planned, including: the construction of a semi-permanent centennial pavilion at the Wright Brothers National Memorial, a gala series and capital improvements to the Wright Memorial. Dick Howard, president of the Foundation, is a Centennial of Flight Commissioner. <http://www.firstflightcentennial.org/>

- **Inventing Flight: Dayton 2003** is charged with promoting aviation, the Wright brothers, and the role of Ohio in the birth and future of flight. The height of activities in Dayton will occur July 3-20, 2003, when Deeds Park, a 12-acre site near downtown Dayton, will be transformed into Celebration Central. Other activities will include: a hot-air balloon race, Dayton Air Show, International Airship Meet, National Aviation Hall of Fame Ceremonies, commissioned symphonic works, photography exhibits, Inventing Flight Class of 2003, curriculum and choreographed dance works. J. Bradford Tillson, chairman of Inventing Flight: Dayton 2003, is a Centennial of Flight Commissioner. <http://www.inventingflight.com/>

More information on the Commission can be found at: <http://www.centennialofflight.gov>

# You can make a difference in the lives of others

by Lesley Guerin

**Y**ou can be actively involved in protecting your coworkers from illness and injury, both on and off the job. You won't have to commit large blocks of time to the effort. You won't have to volunteer to serve on a committee or team. You won't even require approval from your supervisor to participate! How does it work?

Our Safety, Health and Environmental (SHE) Program has evolved to the point where we are usually effective in identifying and controlling major hazards. We successfully communicate about hazards that are ongoing characteristics of a work area or operation. It is the lesser hazards, and risky conditions that crop up, that tend to result in injuries and illnesses both on and off the job.

Learning to recognize hazards and understand related risks gives us the power to eliminate or control the possibility of illness or injury. The SHE Communications Team sponsors a Web site database, called "It Could Happen To You." This database offers you an opportunity to share lessons learned from accidents that almost happened, or could have happened, as well as those that did occur. You can help expand awareness of the smaller hazards and risks we confront every day, both on and off the job.

After a close call, our human nature compels us to review the circumstances. We ask: "How can I keep this from happening again?" or "How can I keep that from happening to me?" We teach ourselves to recognize and respond to those conditions, to

avoid similar incidents in the future. We know that we may not be so lucky the next time around.

Think about it. If you weren't aware of the hazard, or what you needed to do to avoid it, how many others may not know, either? Use the "It Could Happen To You" database to share your personal lessons learned, and to learn from the experiences of others. Go to the SHE Home Page at:

<http://inside.msfc.nasa.gov/SHE/>. Click on the green button marked "File a Report, Ask a Question or Voice a Concern." Click on the button that says "It Could Happen To You," and choose to enter a new story, or to view stories entered by others.

Stories in the database make excellent Safety Moment topics. Focused on life at work and at home, the stories share lessons learned about unrecognized hazards and risks. Your story can be a personal experience, or something that happened to someone else. You can share what you learned from a work-related incident — things that may not fit in the official report. You can even submit stories about accidents that are "waiting to happen," if people don't see the hazard.

Empower your coworkers to do a better job of protecting themselves and their loved ones. Sharing your knowledge and experiences in the "It Could Happen To You" database is a powerful way to express your concern for coworkers. Add a story to the database today. You can make a positive difference in the lives of those around you.

*The writer, employed by Hernandez Engineering Inc., supports Marshall's Safety Office.*

## Request research and student interns through VREO Program

from Education Programs Department

**S**ummer's coming and many Marshall program offices and directorates are looking for research and student interns.

Marshall's Education Programs Department is accepting requests from Marshall Center program offices and directorates for visiting researchers and summer student interns through the Visiting Researcher Exchange and Outreach Program (VREO).

This program is a partnership between the Marshall Center's Education Programs Department and Universities Space Research Association. It uses university and industry alliances to meet the current needs of Marshall's project offices, laboratories and directorates.

All VREO activity begins with contact from a Marshall project office, laboratory, or directorate with available funding and a specified need. Specific needs are expressed through a statement of work and when necessary, searches are conducted.

This Marshall-unique program facilitates the process of establishing on-site working relationships between university, private sector and government agency researchers with Marshall scientists, engineers and technologists. Administrative costs are factored into each activity.

Visiting researchers include scientists and engineers, undergraduate and graduate students, college faculty, post-doctoral and distinguished senior researchers, who are requested and funded by Marshall. Appointments vary in length and are

structured to meet the specific research task or need being addressed.

The outreach component of the VREO Program facilitates the exchange of scientific, engineering and technical information between Marshall and outside communities by coordinating seminars, meetings, workshops and colloquia. Additionally, the VREO program assists in coordinating the review of white papers and technical documents.

Program staff is available to brief representatives of programs or departments on VREO and assist those interested in understanding and using this program.

For more information, call Debbie Hurst at 544-0889 or Shelia Nash-Stevenson at 544-3453.

## Marshall engineer receives award during Engineers Week

**A**t the Huntsville Engineers Week Awards Banquet held Feb. 22, George Hamilton, a team leader in Marshall's Engineering Systems Department received the Alabama Society of Professional

Engineers (ASPE) Distinguished Service Award from the Huntsville Chapter.

Maj. Gen. Hans Van Winkle, deputy commander of the U.S. Army Corps of Engineers in Washington, D.C., presented the award. It recognizes Hamilton's 11

years of service to the Chapter MathCounts Committee, including 10 years as MathCounts coordinator.

MathCounts, which began as a local competition in Birmingham, is a national mathematics tournament for middle school students with qualifying competitions held at the local and state levels for a national level competition. Hamilton coordinates the local competition which includes five Northeast Alabama counties. NASA is a corporate sponsor of MathCounts.



From left are George Hamilton; Connie Gipson, president-elect of the Alabama Society of Professional Engineers; Dr. Jorge Aunon, dean of engineering at the University of Alabama in Huntsville; Dr. Vijaya Gopu, Huntsville Chapter ASPE, Educator of the Year; and Maj. Gen. Hans A. Van Winkle, deputy commander, at headquarters U.S. Army Corps of Engineers in Washington, D.C.

## Symposium on future Reusable Launch Vehicles April 11-12

**S**afe, reliable and affordable space transportation is critical to the development and exploration of space. Significant efforts are being conducted internationally in the development of future Reusable Launch Vehicles (RLV).

The 1st American Institute of Aeronautics and Astronautics/International Aeronautical Federation Symposium April 11-12 will present and discuss RLV developments by the United States, Europe, Russia and Japan. This will include an overview of NASA's Integrated Space Transportation Plan (2<sup>nd</sup> and 3<sup>rd</sup> Generation RLVs), European, Russian and Japanese RLV plans. Presentations and discussion panels will address both ongoing and planned RLV development activities that utilize both near- and longer-term technologies.

Civil servants who would like to attend this symposium, should submit a Marshall Conference Form 1265 to Linda Law/CD20. To find out more information and for registration please go to [www.aiaa.org](http://www.aiaa.org).

Civil servants should wait for an approved confirmation from the Employee & Organizational Development Office before officially registering for the conference.

For more information, please contact the Space Transportation Directorate/Integration Office, Francee Logston/TD03 at 544-3035.

## Obituaries

**Potter, William R., 92**, of Memphis, Tenn., died Feb. 9. He retired from Marshall in 1972 where he worked as an aerospace technology engineer for experimental tooling and equipment. He is survived by his wife, Adelaide Potter.

**Hamilton, Edward C., 72**, of Huntsville, died Feb. 10. He retired from Marshall in 1985 where he worked as an aerospace engineer. He is survived by his wife, Rena Hamilton.

**Turner, Tom W. Sr., 80**, of Huntsville, died Feb. 14. He retired from Marshall in 1981 where he worked as an aerospace technology engineer for quality assurance. He is survived by his wife, Elberta McLoon Turner.

**Kelly, Robert E. Sr., 78**, of Huntsville, died Feb. 16. He retired from Marshall in 1987 where he worked as a management information specialist. He is survived by his wife, Dr. Jane H. Kelly.

# 'Shuttle Sisters' at the Marshall Center live their dreams with every successful Shuttle mission

by Lynnette Madison

*Editor's note: For the first eight-and-one-half minutes of each Space Shuttle launch, the Marshall Center's Amanda Goodson and her sister Yolanda Harris admit they find it difficult to breathe. Why? Because as part of Marshall's Space Shuttle team, they share responsibility for those first minutes of the launch. Space Shuttle Columbia is scheduled to launch Thursday at 5:48 CST.*

"Sisters is probably the most competitive relationship within the family, but once the sisters are grown, it becomes the strongest relationship." — Margaret Mead

**Y**ou can't blame 97-year-old Amanda Dabney of Decatur, Ala., for bragging about her two granddaughters, sisters Amanda Harris-Goodson and Yolanda Harris. Both are part of the Space Shuttle team at the Marshall Center.

"If you ask her, she'll tell you we run this place and we make sure each Space Shuttle launch is a success," says Goodson of her grandmother, as a broad smile eases across her face.

"And you just don't argue with your grandmother."

Especially when your grandmother's lived a lot of history.

What Amanda Dabney has lived, seen and learned — she instilled, even way back when, in her two young granddaughters. She taught them the joy — and necessity — of education, and equally as important, to believe in oneself.

For the two sisters, growing up in Decatur meant strong family and church ties, juggling marching band, piano lessons and dreams.

"We knew early on we had to achieve," says Goodson. "Everyone — not just our parents — set high standards. In fact, people we didn't even know — but who knew our mom and dad — would remind us how smart our parents were. And then tell us they

expected the same of us."

Today, Goodson, an engineer, is director of the Marshall Center's Safety and Mission Assurance Office. She oversees safety and quality activities on all Marshall Center programs.

Harris, also an engineer, served as team lead of the Systems Engineering group in Marshall's Shuttle Integration office until last year. Today she is on temporary assignment at the Office of Space Flight at NASA Headquarters in Washington, D.C., working with the Space Shuttle office as a liaison to Marshall's Space Shuttle Project Office. She also handles U.S. Congressional actions on launch and legislative issues — including safety.

"It is a privilege to be involved in the launch of the Space Shuttle," says Goodson, who has been with NASA 18 years. "Marshall's continued commitment to the safe flight of each Shuttle is an integral role that those of us who work here play each day."

"Everyone in the Space Shuttle program is our family," adds Harris. "Because we feel like family, it makes flight safety such an important message. You always want to keep your family safe."

The Marshall Center serves as a key leader for NASA's research and development of propulsion systems that enable safe, reliable and lower-cost access to space and space exploration. Marshall manages the Shuttle's External Tank, Solid Rocket Boosters — which include the Reusable Solid Rocket Motor — and Main Engines.

"When we were kids, Amanda used to tell me she wanted a fun job," says Harris, teasing her older sister. "One where she could tell people what to do."

The nuts and bolts of NASA rocketry never entered the young women's minds back then.

Because both women had a love of science and math, they followed in the footsteps of their late father, Harold Harris, majoring in electrical engineering. Both sisters graduated from Tuskegee University in Tuskegee, Ala.

The sisters are keenly aware that even today, women engineers are rare — and female African-American engineers even more rare. They each achieved their goals. Plus some additional, personal choices in life.

"Yolanda wanted to be a lawyer — and she is. I wanted to be a leader — and I am," says Goodson. "You can't let limiting beliefs control your life. You should decide the kind of person you want to be, and you create that person.

"You should create a niche: Do things no one else can do or will do. You should pursue excellence and goals that will allow you to reach your full potential."

Though Goodson had other job offers when she graduated from Tuskegee in 1983, she chose an



Harris

See *Sisters* on page 9

## Sisters

*Continued from page 8*

internship with the Marshall Center's Product Assurance Office in the Science and Engineering Directorate.

"With NASA, you know you are on the leading edge of the future," says Goodson. "Every day is a new day with different challenges and solutions. Even the stressful days are fun."

The sisters' paths diverged as Harris completed her bachelor's degree at Tuskegee in 1986, and earned her Juris Doctor degree from the University of Alabama in Tuscaloosa in 1989.

Goodson rose through the ranks of Marshall's Safety and Mission Assurance Office. And worked to earn a master's degree in management from Florida Institute of Technology, a doctor of ministry from United Theological Seminary and completed NASA's Senior Executive Service Career Development Program.

The sisters' paths converged in 1991 when Harris became a quality engineer in Marshall's Safety and Mission Assurance Office, working with the External Tank and Solid Rocket Booster Projects and the Space Station Furnace Facility Project.

"I couldn't help but catch Amanda's excitement about the Space Shuttle and NASA," she explains.

Harris, an active member of the Alabama State Bar Association, also has made a difference at Marshall with positions of increased responsibility in the Shuttle Projects Office.

Both women have been honored with NASA's Exceptional Service Medal, as well as numerous other awards.

In their spare time, both sisters enjoy speaking about NASA and giving motivational talks to church groups, clubs, civic and professional groups, youth groups and school students. "That's something we both share: We love to talk," adds Harris.

As a teen-ager, Goodson felt she had limits. She now sees them as opportunities for growth — a message she likes to share. "Kids today need to see what is at their fingertips," says Goodson.



Photo by Emmett Given, NASA/Marshall Space Flight Center

**Goodson**

Setting goals and challenging themselves is a life-long habit for the two women.

"Expect the best and the best will come," says Goodson. "I believe you should envision yourself in the future and work toward that goal. And, if you don't like what you're doing now, recalibrate and focus on what you want to be. Live your life to reflect what you want to be."

Harris laughs at her sister's response, and adds: "I can't say it any better than that."

*The writer, employed by ASRI, supports the Media Relations Department.*

### Energy tip

## Energy Right rebate program offers savings

*Editor's note: This week's energy tip comes from Russell Moore of Alabama's Science, Technology and Energy Office.*

Alabama's Science, Technology and Energy office recently sponsored a workshop for the Huntsville Homebuilders Association concerning home energy ratings and energy efficient mortgages.

Did you know the Tennessee Valley Authority has the Energy Right rebate program in Huntsville for energy efficient new construction? Compliance with this program gives opportunities for additional

monetary savings. For example:

1. Want to know how to keep your home comfortable, no matter what the weather outside? An electric heat pump installed through the Energy Right Program cools and heats your home to give you a constant, comfortable temperature year round.

2. If you are building a new home or shopping for a newly constructed home, make sure it is Energy Right. The Energy Right Program provides a rating of your new home's relative efficiency that could mean rebates or other incentives from your local public power company, as well as

qualifying your home for special financing.

For additional information, look at the following Web sites:

<http://www.natresnet.org/alabama/> The Web site for energy mortgages that includes a list of raters in your area.

<http://www.energyright.com/> The Web site for the TVA Energy Right rebate program in Huntsville for energy efficient new construction. <http://adeca.state.al.us/> The Web site for the Science, Technology and Energy office for the State of Alabama.

If you have an energy tip that you would like to share, send it to: [cedreck.davis@msfc.nasa.gov](mailto:cedreck.davis@msfc.nasa.gov)

# Softball season gets under way

Marshall's softball season kicked off Wednesday with an organizational meeting.

The Marshall Exchange Softball League consists of three divisions, with Division I being the most competitive and Division III the least competitive. The season begins in April and ends with a double elimination tournament in August.

Anyone interested in playing can call League Commissioner Dawn Ray at 544-3648.

Last year's winners were the LB&B Bandits in Division I (top photo). Pictured in the front row from left: Sam Rodgers, Doug Parkinson, Marvin Williams and Whitt Pressley. Back row, James Hunter, Tommy Barron and Greg Wirt. Not pictured, Al Mayers, Lonnie Hayes, Tony Parton, Edwin Sutton and Brian Thompson.

The Station Rats finished in first place in Division II (center photo). Pictured from left, front row: Brian Matisak, Brad Watson, Joel Bartlett, Brandon Zeller, and Barry Bryant. Middle row, Mark Judge, Paul Trauffer, Jason Matheney, Bill Telesco and John Jupin. Back row, John Troy, John Bartlett, Eric Green, Wayne Wright and Terry Jones. Not pictured, Lynn Baker and Tony Scaffardi.

The TBE Integrators (bottom photo) won Division III. Front row from left: Nate Neveu, Lisa Martin, Donna McClamb, Jimmy Wrape, Byron Bonds and Beth Young. Second row, Gary Wagner, Rantz Berryman, Torsten Segewitz, Brad Mason, Boyd Evens, Scott Walter and Leigh Young. Clif Jones and John Geiger are not pictured.



LB&B Bandits, 2001 Division I champions.



Station Rats, 2001 Division II champions.



TBE Integrators, 2001 Division III champions.

# Center Announcements

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## Annual retiree dinner

The Annual Marshall Retiree Dinner will be March 14 at the Von Braun Center. Marshall retirees, employees, contractors and guests are welcome. Tickets are \$16 each for either prime rib or marinated grilled chicken. Tickets can be purchased through administrative officers. Retirees may call Patricia Caraway in Bldg. 4200, room 322C, at 544-7755.

## Quit smoking online

All Marshall Center employees, contractors and family members (age 18+) who smoke and want to stop are eligible for free access to the Internet-based 1-2-3 Smokefree Program developed by the Oregon Center for Applied Science (ORCAS). This program recently was tested by real-world smokers and found to be very effective. In the evaluation, in which Marshall employees participated, ORCAS found that the quit-smoking rate among people who used the program was 2.5 times higher when compared to people who had not yet used the program. To access the program, go to [www.quitcigs.org](http://www.quitcigs.org) Use the password: Marshall. The program will be available through Aug. 15. If you have questions after looking at the Web site, please call ORCAS toll-free at 1-866-730-3211 or send an e-mail to [quitcigs@quitcigs.org](mailto:quitcigs@quitcigs.org). The Smokefree Program was funded by the National Cancer Institute.

## Become a CFC organization

The Tennessee Valley Combined Federal Campaign (CFC) is accepting applications from non-profit organizations for participation in the 2002 fund-raising campaign. Under federal law, an organization must have 501(c)(3) status, proof of human health and welfare services, an annual audit/IRS 990 Form, and a board of directors. The open period for acceptance of application packages will be March 1-April 6. For more information, call Melinda Seigler at 536-0745, ext. 108, or Gay Money at 876-9143.

## Clubs and Meetings

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### BIG soul food dinner

The Huntsville-Madison County Chapter of Blacks in Government (BIG) will have a pot luck soul food dinner at 6 p.m. March 1 at the Flagstone Apartment Club House. To attend, call Arlene Erskine at 876-1101 or 837-1482.

### Retiree Association social

The NASA/Marshall Retiree Association will hold its spring social and dinner at the Valley Hill Country Club March 7. The social begins at 6:30 p.m. with cash bar. Buffet dinner will be served at 7:15 p.m. followed by a short program. Cost is \$16 per person and dress is casual. Visitors are welcome. Call Ellery May at 881-2553 no later than March 5 for reservations and pay at the door.

### Black Physicists meet

The annual conference of the National Society of Black Physicists (NSBP) and the National Conference of Black Physics Students (NCBPS) brings together more than 400 African-American physics students and professionals. Alabama A&M University will be the host for the joint 2002 meetings March 13-17. Private businesses, government agencies and research organizations, faculty search committees, and graduate student recruiters are invited to participate in the career fair. Space for display and classified ads is available for the spring 2002 NSBP Newsletter, the conference program book, and the conference proceedings. For details, call Madeline Hereford in Marshall's Equal Opportunity Office at 544-7420.

### Dance lessons

The MARS Ballroom Dance Club will offer bolero and cha-cha lessons on Mondays in March at St. Stephen's Episcopal Church on the west side of Whitesburg Drive, second building north

of Lily Flagg Road. The intermediate lesson is from 7-8 p.m. and beginner lesson from 8-9 p.m. Rick Jones, USA certified dance instructor at Rocket City Dance Studio, will be teaching. Cost is \$7 per person per class. For more information, call Woody Bombara at 650-0200.

### Toastmasters International

NASA Lunar Nooners Toastmasters Group meets at 11:30 a.m. every Tuesday in the conference room of the cafeteria in Bldg. 4610. Visitors are welcome. For more information, please call Dr. Ruth D. Jones at 256 544-3191 or [ruth.jones@msfc.nasa.gov](mailto:ruth.jones@msfc.nasa.gov).

### Instrumentation Division meets

The Measuring Branch, Telemetry Branch and Radio Frequency Branch meet the first Tuesday of each month at 11 a.m. at the Redstone Golf Club Coffee Shop. For more information, call Tom Escue at (256) 232-1549.

## Miscellaneous

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### Easter Egg Hunt volunteers

Volunteers are needed for Marshall's annual Easter Egg Hunt being held at 2 p.m. March 17 at the picnic area. To volunteer, call Gena Marsh at 544-0160.

## Redstone Arsenal

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### Art Auction

Redstone Arsenal's Officer and Civilian Women's Club will hold an art auction March 2 at the Officers' and Civilians' Club. Preview of the artwork begins at 5:30 p.m. with the auction at 7. Tickets cost \$8 and are available at the Officers' and Civilians' Club. Tickets will be available at the door the evening of the auction. Gourmet light hors d'oeuvres will be served during the auction and there will be a cash bar. The club is offering a prime rib buffet at 5 p.m. for \$12.95.

# Employee Ads

## Miscellaneous

- ★ Infant car seats, \$10; bounce seats, \$10; infant girl's clothing, \$2-\$15. (256) 776-4458 after 5 p.m.
- ★ 1992 Gibson Les Paul Classic, Honeyburst, 1960's patent number pickups, OHSC, \$1,300. 325-8377
- ★ Solid wood king-size waterbed, dresser/mirror, two nightstands, \$650 obo. 464-0231
- ★ Remington 700ADL 270 caliber rifle w/44 mag scope, \$450 obo. 232-6881
- ★ Couch, brown stripe pattern, \$100; oak rocking chair with pads, \$50. 721-9005
- ★ Golf clubs, irons, Snake Eyes TC-01, graph alloy shafts, 4-pw/sw, \$200. 536-6921
- ★ White tile/natural wood kitchen table with 4 chairs, \$150; queen-size mattress set with bed frame, \$75. 534-1938
- ★ Stereo speakers, Advent 14x26x11, \$50 each; AR18s, 9x16x6, \$40 each; stereo receiver, JVC RX403BK, 60 watts, \$50. 355-6648 after 5 p.m.
- ★ Spanish dining set; table, 4 guest & 2 master chairs, leather backs/seats, \$150. (256) 883-0439
- ★ King-size mattress/box spring w/three sets sheets, comforter, bed skirt, \$200. 508-2494
- ★ Quarter horse, gelding, Peppy on top, Sugar on bottom, \$3,000. (256) 353-8120
- ★ Table w/4 chairs, beige with gold trim and mauve cushions, \$250 obo. 430-3413
- ★ Robert E. Lee bust, 12", \$90; 30 record albums, \$1 each. 882-1097
- ★ Country Red Farmhouse table, 4 chairs and bench, w/matching buffet and china cabinet, \$450. 851-1598
- ★ Heavy duty, large gauge bird cage on casters, 34x24x48 inches, \$100 obo. 722-8004 after 6 p.m. weekdays
- ★ DR power wagon w/dump bed, 6HP, electric start, used one season, \$1,000. 883-6446

- ★ Washington, Jefferson, Adams, Madison on horseback, Brunshwig and Fils quilted wall hanging. \$50. 882-1097
- ★ Baby crib, \$275; changing table, \$50; two light fixtures, \$50 ea.; brass ceiling fan, \$20; recliner, \$350; sewing machine, \$50; dinette table, \$800. 772-3138
- ★ Fish tank, 55 gal., \$200; drafting table, \$250; piano, \$900; swimming pool, 24x4, \$1,100. 830-5380
- ★ Two Nokia Model 252 cell phones w/car adapter and battery, \$20 each. 851-2929
- ★ Treated fence boards, 75 cents each. 971-0048
- ★ French patio doors, 6' steel/glass; two bathroom vanity bases, 42", lavatories, faucets. (256) 259-1834
- ★ Couch, \$75; TV stand, \$20; chest, \$20; cabinet, \$10; 56K modem, \$25; transmission, \$50. 464-3300
- ★ Aquarium with lighted hood, 29 gallon, filter, heater, etc., \$150. (256) 437-1064

## Vehicles

- ★ 1995 Honda Civic EX, 4-door, 5-speed, maroon, 75K miles, \$7,300 obo. 830-0548/961-7634
- ★ 1998 Dodge Grand Caravan, SE, \$9,900.

(256) 233-6197

- ★ 1987 S10 Blazer, 4x4, 2.8L, manual transmission, 145K miles, \$2,200 obo. 880-9428
- ★ 1986 Honda Shadow VT1100, garaged, new battery, \$2,900. (256) 498-5343
- ★ 1988 Chevy Silverado truck, 358/V-8, long wheel base, club cab, \$2,700. (256) 880-1555
- ★ 1996 Class C Ultra Supreme motor home, 31', low miles, all major extras, \$34,900. (256) 534-7913
- ★ 1999 Mazda Miata, 5-speed, dark green w/black interior, 22K miles, \$13,000. 351-1373 after 5 p.m.
- ★ 1996 Ford Windstar LX, 87K miles, non-smoker, white/gold/tan, \$7,500. 325-7542

## Found

- ★ Earring, on sidewalk outside of bldg. 4203. Call 544-6052 to identify

## Wanted

- ★ Sewing machine for making draperies. (256) 498-1450
- ★ Fitness flyer exercise machine. 880-7266

## S&H Barber shop offers full services

**W**hy go anyplace else for a haircut, color or perm? S&H Barber Shop in Bldg. 4203 offers a full range of services. It is competitively priced and conveniently located.

Open daily from 8 a.m.-5 p.m., Ronnie Sadler and Ashley Hodge provide both men and women with haircuts and styling tips.

Partner Art Hodge works at the shop Wednesdays and Thursdays.

A clipper cut costs \$9; mini-style, \$10; long hair, \$10; shampoo, \$8; facial, \$8; beard trim with haircut, \$2; beard trim only, \$5; and a style — which includes shampoo and a haircut — \$18.

"We recently had a problem with our phone," Sadler said. "I want to thank our customers for their patience during that time."

For an appointment, call 881-7932.

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